

Daily GLOWBUGS

Digest: V1 #18

via AB4EL Web Digests @ SunSITE

Purpose: building and operating vacuum tube-based QRP rigs

[AB4EL Ham Radio Homepage @ SunSITE](#)

%%%% GlowBugs %%%% GlowBugs %%%% GlowBugs %%%% GlowBugs %%%%

Subject: glowbugs V1 #18

glowbugs

Tuesday, April 29 1997

Volume 01 : Number 018

Date: Mon, 28 Apr 1997 01:12:38 EDT

From: ac4gt@juno.com (nathan c tart)

Subject: "Jd Delancy (K1Zat)" <k1zat@DSPOINT.COM>: You might be a Yankee. . .

- ----- Begin forwarded message -----

From: "Jd Delancy (K1Zat)" <k1zat@DSPOINT.COM>

To: QRM@LISTSERV.VT.EDU

Subject: You might be a Yankee. . .

Date: Sun, 27 Apr 1997 20:42:55 -0400

Message-ID: <Pine.GSO.3.95.970427203953.23438A-100000@puff>

You might be a Yankee if...(you live in Rhode Island)..

- 1) You think barbecue is a verb meaning "to cook outside."
- 2) You think Heinz Ketchup is SPICY!
- 3) You don't have any problems pronouncing "Worcestershire sauce" correctly.
- 4) For breakfast, you would prefer potatoes au gratin to grits.
- 5) You don't know what a moon pie is.
- 6) You've never had grain alcohol.
- 7) You've never, ever, eaten Okra or Spam and Eggs.
- 8) You eat fried chicken with a knife and fork.
- 9) You've never seen a live chicken, and the only cows you've see are on road trips.
- 10) You have no idea what a polecat is.
- 11) Whenever someone tells an off-color joke about farm animals, it goes over your head.
- 12) You don't see anything wrong with putting a sweater on a poodle.
- 13) You don't have bangs
- 14) You can tell the difference between the Mercedes-Benz logo and the Crysler Corp. symbol.
- 15) You would rather have your son become a lawyer than grow up to get his own TV fishing show.
- 16) Instead of referring to two or more people as "y'all," you call

them "you guys," even if both of them are women.

- 17) You don't think Howard Stern has an accent.
- 18) You have never planned your summer vacation around a gun-and-knife show.
- 19) You think more money should go to important scientific research at your university than to pay the salary of the head football coach.
- 20) You don't have at least one can of WD-40 somewhere around the house.
- 21) The last time you smiled was when you prevented someone from getting on an on-ramp on the highway.
- 22) You don't have any hats in your closet that advertise feed stores or own anything resembling coveralls.
- 23) The farthest south you've ever been is the perfume counter at Neiman Marcus.
- 24) Milk comes from the grocery store, not from a cow.
- 25) You can't spit out the car window without pulling over to the side of the road and stopping.
- 26) You don't know anyone with two first names (i.e. Joe Bob, Billy Bob, Kay Bob, Bob Bob)
- 27) You don't have doilies, and you certainly don't know how to make one.
- 28) You've never been to a craft show/rodeo/country fair/animal auction.
- 29) You get freaked out when people on the subway talk to you.
- 30) You can't do your laundry without quarters though you can manage without a washboard

- ----- End forwarded message -----

Date: Mon, 28 Apr 1997 06:12:01 -0400
From: BEN NOCK <106312.1035@compuserve.com>
Subject: BC-728 info wanted

I am in need of a decent circuit for the BC-728
along with a component layout diagram.

If anyone can supply me with such, I would be
most obliged.

cheers, Ben G4BXD

Date: Mon, 28 Apr 1997 08:39:01 -0400 (EDT)
From: EWoodman@aol.com
Subject: 6M Glowbuggy Receiver

Anyone have any ideas on what to use for a receiver for 6M AM & CW? I've got an Ameco TX-62 transmitter but no real receiver to use with it. I slapped together a simple receive converter using.....gulp.....transistors, but need something with a glowbuggy flavor. What about the super regens or "rushboxes" they used to use? I've got a Boonton 54-108 Mc signal generator. Maybe a tube rf amp and mixer using the sig generator as local oscillator? Any thoughts would be appreciated.

73 Eric KALYRV

Date: Mon, 28 Apr 1997 11:47:05 EDT
From: kmlh@juno.com
Subject: Re: 6M Glowbuggy Receiver

How about:

- - NC300/303 with its converters
- - HQ-170A/VHF
- - Ameco, Tapetone, etc converters into any BA HF rcvr.
- - Clegg Interceptor Rcvr

73....Carl KM1H

Date: Mon, 28 Apr 1997 12:16:05 EDT
From: ac4gt@juno.com (nathan c tart)
Subject: Re: 6M Glowbuggy Receiver

Date: Mon, 28 Apr 1997 11:27:18 -0500 (CDT)
From: mjsilva@ix.netcom.com (michael silva)
Subject: Re: 6M Glowbuggy Receiver

Eric wrote:

>...I slapped
>together a simple receive converter using.....gulp.....transistors,
>but need something with a glowbuggy flavor. What about the super
>regens or "rushboxes" they used to use? I've got a Boonton 54-108 Mc
>signal generator. Maybe a tube rf amp and mixer using the sig
>generator as local oscillator?

Coincidentally I just happened to notice a 6m converter in a '40s Handbook over the weekend. It used a 1852 (6AC7) RF amp and a 6K8 converter to convert down to 10 MHz. I was surprised the 6K8 would go that high, but there it was. Any FM-band RF amps and converter tubes would also work, obviously.

73,
Mike, KK6GM

Date: Mon, 28 Apr 1997 12:32:38 EDT
From: ac4gt@juno.com (nathan c tart)
Subject: Re: 6M Glowbuggy Receiver

On Mon, 28 Apr 1997 12:16:05 EDT ac4gt@juno.com (nathan c tart) writes:
>

Date: Mon, 28 Apr 1997 12:32:38 EDT
From: ac4gt@juno.com (nathan c tart)
Subject: Re: 6M Glowbuggy Receiver

On Mon, 28 Apr 1997 11:27:18 -0500 (CDT) mjsilva@ix.netcom.com (michael silva) writes:

>Eric wrote:

>

>>...I slapped

>>together a simple receive converter

>using.....gulp.....transistors,

>>but need something with a glowbuggy flavor. What about the super

>>regens or "rushboxes" they used to use? I've got a Boonton 54-108 Mc

>>signal generator. Maybe a tube rf amp and mixer using the sig

>>generator as local oscillator?

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>Handbook over the weekend. It used a 1852 (6AC7) RF amp and a 6K8

>converter to convert down to 10 MHz. I was surprised the 6K8 would go

>

>that high, but there it was. Any FM-band RF amps and converter tubes

>would also work, obviously.

>

>73,

>Mike, KK6GM

>

>

Date: Mon, 28 Apr 1997 12:41:54 EDT
From: kmlh@juno.com
Subject: WTD: source of Technical Ceramics

I am looking for any sources where I can get various items molded and produced; plate choke and tank coil forms in particular.

Also need source of Fiberglass forms as used by Heath for SB-220 tanks; thin wall and grooved for the wire.

Any leads appreciated.

Tnx...Carl KMLH

Date: Mon, 28 Apr 1997 11:14:57 -0700
From: dfrancis@iex.net (Dexter Francis)
Subject: Tube source for 1/3 less than AES

Greetings folks -

Part of me hates to do this, as it feels awfully commercial, but with all the mentions of AES recently I just have to speak up.

Folks - I have almost every tube that AES does at 1/3 to 2/3 less than they charge and I don't charge more than the USPS for shipping.

Please, before you send off a check to AES or anybody else, check my web page or drop me an e-mail.

There is a very good possibility that I can cover your tube needs and save you money in the process. I also have some transformers, chokes and parts.

- -df

sorry for the interruption

* CWest Tube Sales - P.O. Box 22443 SLC, UT 84122 *
* http://www.usa.net/~dfrancis/CWest_Tube_Sales.html *

Date: Mon, 28 Apr 1997 10:16:21 -0700 (MST)

From: Jeff Duntemann <jeffd@coriolis.com>

Subject: Re: 6M Glowbuggy Receiver

Eric and gang--

(Just got back from a week on the road, hence my quietude...)

At 08:39 AM 4/28/97 -0400, you wrote:

>Anyone have any ideas on what to use for a receiver for 6M AM & CW? I've got
>an Ameco TX-62 transmitter but no real receiver to use with it. I slapped
>together a simple receive converter using.....gulp.....transistors, but
>need something with a glowbuggy flavor.

This is an interesting issue. The receiver in the Gonset Comm II rigs was very modular and fairly simple...I'll go look at the circuit and see what it's like.

When I use a 6M transmitter I use the receiver in the Clegg 99er. This works well, but it seems like cheating somehow. I plan to fire up my Ameco TX-62 next Sunday, now that I have the electrolytics reformed and the mouse turds vacuumed out of the chassis. Looks like a go, but there's still a lot of grime to remove.

>What about the super regens or
>"rushboxes" they used to use?

These work OK on a relatively empty band if you can stand the racket in your phones. I like my little Sixer but it's a nostalgia thing. The noise during non-signal conditions is deafening. I have a simple solid state circuit (two MPF102 FETs) that works as well as the Sixer circuit--and makes just as much noise. You might as well use a tube.

One thing I might suggest is using a converter to an old car radio. I recall seeing lots of almost unused AM radios at hamfests. People buy new but low-end cars and swap out the AM-only radios with fancier AM/FM stereo tape jobs. There are a multitude of converter circuits in the literature, usually a single RF amp followed by a pentagrid converter stage. Not world class sensitivity, but selectivity is good enough and it'll give you the

satisfaction of doing it yourself.

I've got an Ameco 6M converter that puts 6M signals out on 20M. This works nicely and I used to use it to monitor 6M beacons for band openings that never came. Seems I never work 6M during a sunspot max, but always (as now) square in the dead zone.

- --73--

- --Jeff Duntemann KG7JF
Scottsdale, Arizona

Date: Mon, 28 Apr 1997 10:29:18 -0700 (MST)
From: Jeff Duntemann <jeffd@coriolis.com>
Subject: Re: 300 watts out on 40m

At 07:07 AM 4/19/97 +0000, you wrote:
>Did anyone else see the design for a 300-500 watt CLASS-E
>amplifier shown in QST this month?

I did indeed, although it's a multipart article and I get the impression the REAL challenges are in the next QST. BUT...the first question that flashed across my mind was, Could this trick be done with tubes? Now, I don't pretend to fully understand Class E, but it sure sounded like a conventional power amp fed power through a high rise time/fall time chopper running at about 100KC. I didn't see anything that looked utterly FET-specific, especially since FETs are just tubes with the vacuum sucked out of them.

I'm not a EE and totally self taught, so what I'd like to ask (especially of the people who work in broadcasting and follow these things) whether it's possible to do a Class E power amp using tubes. I would be willing to try it even if I had to use solid state in the power supply--I'm by no means a purist, and have been using solid state rectifiers in tube projects all along, way back to 1964 or so.

90% efficiency would be a kick, just to be able to say I had it!

- --73--

- --Jeff Duntemann KG7JF
Scottsdale, Arizona

Date: Mon, 28 Apr 1997 13:53:59 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: 80M GB funzies

Like I said, I was on 80M last night, and will be for the next few nites. I was there from 3 in the afternoon until a little after midnight, every so often, and on the hour. Did manage to work KB8OYR in Michigan, and K1FR in NJ (running a 1 tube rig and a 1 tube regenerator), and N4QY down the state from me. So, it was not a complete bust. The band was actually pretty good out to 1500 miles or so, but not quite transcontinental.

QTR 0400Z/QRG 3579R545KCS

73/ZUT DE NA4G/Bob UP

Date: Mon, 28 Apr 1997 13:40:49 EDT
From: ac4gt@juno.com (nathan c tart)
Subject: Re: 300 watts out on 40m

On Mon, 28 Apr 1997 10:29:18 -0700 (MST) Jeff Duntemann
<jeffd@coriolis.com> writes:
>At 07:07 AM 4/19/97 +0000, you wrote:
>>Did anyone else see the design for a 300-500 watt CLASS-E
>>amplifier shown in QST this month?
>
>I did indeed, although it's a multipart article and I get the
>impression
>the REAL challenges are in the next QST. BUT...the first question
>that
>flashed across my mind was, Could this trick be done with tubes? Now,
>I
>don't pretend to fully understand Class E, but it sure sounded like a
>conventional power amp fed power through a high rise time/fall time
>chopper
>running at about 100KC. I didn't see anything that looked utterly
>FET-specific, especially since FETs are just tubes with the vacuum
>sucked
>out of them.
>
>I'm not a EE and totally self taught, so what I'd like to ask
>(especially
>of the people who work in broadcasting and follow these things)
>whether
>it's possible to do a Class E power amp using tubes. I would be
>willing to
>try it even if I had to use solid state in the power supply--I'm by no
>means a purist, and have been using solid state rectifiers in tube
>projects
>all along, way back to 1964 or so.
>
>90% efficiency would be a kick, just to be able to say I had it!
>
>--73--
>
>--Jeff Duntemann KG7JF
> Scottsdale, Arizona
>
>
>

Date: Mon, 28 Apr 1997 13:49:12 -0400 (EDT)
From: SVETENGR@aol.com
Subject: Questions about Svetlana tubes?

Just a little note to you folks on the Glowbugs list:
We do have a few types that are suitable for vintage HF gear or
for homebrewing, such as our 811A, 572B, and new SV6L6GC.
If you have any technical questions about Svetlana tubes, you
are welcome to look at our web site www.svetlana.com,
or email us at engineering@svetlana.com, or call us at
(415) 233-0429.

Eric Barbour
Svetlana Electron Devices

Date: Mon, 28 Apr 97 13:23:35 cst
From: mack@mails.imed.com
Subject: Re[2]: 300 watts out on 40m

I finally got a chance to read the article in depth over the weekend.

It looks to me like it is just a flyback converter like in a switching
P/S or the horizontal output of a TV. The way a flyback works is to
charge an inductor and then dump the energy into the load.

If that is what it really is, I'm amazed that the original guys got a
patent on it. (no I'm not. The idiots at the patent office don't have
a clue!) But then you get what you pay for.

If it is, indeed, a classic flyback circuit it should be doable with
tubes. You might need to use something like a 2C39 or 7289 UHF type
tube to get reasonable drive requirements though. In essence the drive
is a digital signal! This isn't a whole lot different than class C. The main
difference is that the drive is more square and has a faster rise time.

But then again I may have totally missed the point.

Ray Mack
WD5IFS
mack@mails.imed.com
Friendswood (Houston), TX

Reply Separator

Subject: Re: 300 watts out on 40m

<snip>

BUT...the first question that flashed across my mind was, Could this
trick be done with tubes?

<snip>

90% efficiency would be a kick, just to be able to say I had it!

- --73--

- --Jeff Duntemann KG7JF
Scottsdale, Arizona

Date: Mon, 28 Apr 1997 14:47:19 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: Questions about Svetlana tubes?

> Just a little note to you folks on the Glowbugs list:
> We do have a few types that are suitable for vintage HF gear or
> for homebrewing, such as our 811A, 572B, and new SV6L6GC.
> If you have any technical questions about Svetlana tubes, you
> are welcome to look at our web site www.svetlana.com,
> or email us at engineering@svetlana.com, or call us at
> (415) 233-0429.
>
> Eric Barbour
> Svetlana Electron Devices

Eric....

We appreciate Svetlana's interest in our somewhat odd vacuum tube needs.

One of the main needs for our period glowbugging (1920's/30's style) is a 10 watt triode, something roughly equivalent to a '10, or an 801A, or approaching a '211. A single ended triode on a classic 4-pin base would do. Local audiophiles suggested an 811-3 or an 811-10 which was apparently a low/medium mu triode of about the right size and power dissipation, in a single ended base. Can you discuss these and related tubes that you might be offering? A quick rundown of voltages/currents and usual service classes would be of value to us.

Can you suggest something that would be appropriate for a standard Hartley oscillator or low power amplifier stage? Anything in the 7.5-100 watt power triode range would be suitable. From my limited information about your 811-3 and 811-10 tubes, it would seem that they should be suitable in such service.

One other need we have is a standard receiving triode roughly equivalent to a '30 or an '01A in a standard 4 pin base. Is there anything in your line that would be roughly satisfactory for such service in an amplifier or detector? Alternatively, a standard triode in an octal base would be usable, something roughly equivalent to a 6J5 type tube.

It would be my expectation that such tubes would be usable by both the radio and audio folks, since these triodes are generically designed and rated.

Your 6L6 would be ideally suited to many of our building needs. I understand you are considering/developing a 6146 tube also. That would be ideal for our needs, too.

I, and others in the Glowbug and Boatanchors mailing lists appreciate Svetlana's interest in our needs.

Thanks!

73/ZUT DE NA4G/Bob UP

Robert D. Keys
rdkeys@csemail.cropsci.ncsu.edu

You may reply to me directly and I will mirror it to our mailinglists.

Date: Mon, 28 Apr 1997 19:00:23 +0000
From: Sandy W5TVW <ebjr@worldnet.att.net>
Subject: BA/GB qrg's

Does anyone want to try during the day (afternoon 1800-2400Z)? 7050
or maybe
even 20 meters?

73

E. V. Sandy Blaize, W5TVW
"Boat Anchors collected, restored, repaired, traded and used!"
417 Ridgewood Drive,
Metairie, LA., 70001
ebjr@worldnet.att.net
Looking for: 860 tubes, WL-460 tubes
Butternut HF2V antenna, G-R test gear.....*

Date: Mon, 28 Apr 1997 13:35:18 -0700
From: dfrancis@iex.net (Dexter Francis)
Subject: 117Z6 Voltage Doubler Application???

Greetings all -

I'm pondering the fabrication of a small external power supply for use with
ARC-5 type gear.
The voltage requirements are close enough to 24V AC and 240VDC that I was
considering using
a 117Z6GT to make a transformer-less 120V to 240V doubler and a small 24 to
28 volt filament
transformer for the heaters. Now for the brain teaser of the day:

The schematic in the Electron Tube Applications section of the RCA databook
shows a "Protective Resistor" between the heater and the mid point of the
two capacitors in the output leg. There is
no value given for this resistor. I assume it's to current limit the
output. Does anyone have
knowledge of how to size this resistor, or a schematic of a
"transformerless" radio which employed
this full wave doubler method, which could be extrapolated from? Again,
the application is to power
an ARC-5 type receiver.

thanks in advance.

- df

* CWest Tube Sales - P.O. Box 22443 SLC, UT 84122 *
* http://www.usa.net/~dfrancis/CWest_Tube_Sales.html *

Date: Mon, 28 Apr 1997 15:52:39 -0400 (EDT)
From: rdkeys@csemail.cropsci.ncsu.edu
Subject: Re: BA/GB qrg's

> Does anyone want to try during the day (afternoon 1800-2400Z)? 7050
> or maybe
> even 20 meters?

I will crank up the AN/SRT-14 on 7050 each hour until 2400Z tonight, then move to 80M until 0500Z.

Bob/NA4G

Date: Mon, 28 Apr 97 16:26:32 CDT
From: sinned@VNET.IBM.COM
Subject: FS; HT-37, HW-100

I'm selling these units for an elderly ham friend who is retiring from HF activity.

HT-37 Cosmetics, 8-9. Tested on 80/40/20 CW only, have no mic to test SSB. Original manual, no mods, very clean underneath. \$150/reasonable offer

HW-100 Cosmetics 5-6. Tested on 80/40/20 CW only. AC and 12vDC supplies, cables, speaker, mic included. Receiver seems exceptionally good on this unit. Some extra holes drilled in top cover. Original manual. \$125/reasonable offer

Located in Dallas, Texas area. These are a bit large for reliable shipping. If you're coming to Hamcom, June 6-8 we could get together then. If you want to see them powered-up or test them first, contact me via e-mail and I'll give you directions to the QTH.

Dennis W5FRS
sinned@vnet.ibm.com

Date: Mon, 28 Apr 1997 18:39:58 +0100
From: BOB DUCKWORTH <bob@atl.org>
Subject: Re: 300 watts out on 40m

I stole a look at Sandys QST (he lives in my basement) but didn't want to keep it too long.

It looks like they are taking a MOSFET that has a lot of gate C and cramming the current in by making it part of a resonant circuit. My remaining brain cells seem to recall the same trick applied to tubes with too much grid C.

Here is where I think it's different.

Isn't the gate C pretty dependent on the drain current? The need for keying the power supply rather than the drive would suggest that the 'swinging C' needs a

pretty goood push to get going.

Could be way off seeing as there is no math here but my imagination makes this look pretty good and I bet keying the drive would make for a very soft note if any at all :-)

I've got some 800V 10amp MOSFETs if anyone wants to play with this. I'll trade for items useable in messing around with tube radios.

73,
- -bob
WB4MNF

Date: Mon, 28 Apr 1997 21:44:30 -0400 (EDT)
From: leeboo@ct.net (Leon Wiltsey)
Subject: NEED GOOD INFO ON REGENS

>To: BA
>From: leeboo@ct.net (Leon Wiltsey)
>Subject: NEED GOOD INFO ON REGENS
>Cc:
>Bcc:
>X-Attachments:
>
>Hi Gang
>dont want to seem picky, but asked for some
>info on regen design a while back and rec
>many conflicting answers. My regen is operating
>Ok, but would like to take it to the max, SO do any
>of you out there know of a publication dealing with
>regen design, for tube type equipment. Now I am
> not looking for a book that is so old the owner thinks
>each page is made out of gold. But something
>that is reasonable in price. want to see just how good
> a regen rec I can make. Appreciate any info as to the name
>of the book and just where I can obtain it.
>

Thank the good LORD for all that you have!!!

Leon B Wiltsey jr. (Lee)
4600 Lake Haven blvd...
Sebring fl 33872.....

68yr old retired semi disabled senior
(stroke got my balance and coordination)
formerly w4kcj & kp4ryb (till I quite) dumb dumb
waiting for my tech+ lic to arrv 73's
play keyboard and sing
music 1920's to 60'
none of the 80'S- 90'S noise

Date: Mon, 28 Apr 1997 18:44:31 -0700 (PDT)
From: Ken Gordon <keng@uidaho.edu>
Subject: Re: 300 watts out on 40m

> I'm not a EE and totally self taught, so what I'd like to ask (especially
> of the people who work in broadcasting and follow these things) whether
> it's possible to do a Class E power amp using tubes.

I believe this has been done in the commercial radio field for years. You might want to look at the schematics for some of the older AM broadcast transmitters.

Date: Mon, 28 Apr 1997 19:36:53 -0800
From: "Kenneth G. Gordon" <keng@uidaho.edu>
Subject: Needed info and parts...

1) Although I have several different handbooks here, I am still somewhat in the dark concerning grid-block keying applications.

I am converting an old VF-1 to grid-block keying, and although it works, it is not completely satisfactory. The handbooks give basic info only and I think I need something more detailed. Any references you could point out would be welcome.

2) Does anyone here know of a source for those older, large (4" diameter), black vernier drives ? I need at least two to replace the too-light small Japanese units I put on an antenna coupler about 15 years ago.

Thanks, all, 73,

Ken Gordon W7EKB

Date: Mon, 28 Apr 1997 19:49:49 -0800
From: "Kenneth G. Gordon" <keng@uidaho.edu>
Subject: HW-16...

I have recently aquired an HW-16. I have been working on it and have it working fairly well. I intend to give it to which ever of my children gets his Novice + ASAP.

My questions to the group are:

1) The dynamic regulation of the power-supply seems to be pretty poor. Is there a simple way to fix this?

2) There is an extremely loud click on break each time the key is opened. Is it possible to fix this without redesigning the whole keying system?

3) When using crystals, the unit is pretty chirpy...more so than I

will accept. I tried voltage regulating the oscillator screen with a VR-150 which helped a lot, but didn't eliminate the chirp. Anyone here had experience with fixing this problem? The chirp is almost non-existent when I use an external VFO.

4) There is a TERRIBLE hum on both the received and transmitted signals on 80 meters (only). I thought that perhaps the bias supply had too much ripple (which I haven't checked yet, but will). Has anyone here had similar problems, and what did you do to fix it?

5) I have come up with what seems to be a pretty easy method of turning the HW-16 into a true transceiver (with the receiver VFO controlling the transmitter also). However I am concerned about a) how to implement RIT with a minimum of redesign, and b) stability of the oscillator. Anyone here have any ideas they would like to share?

6) Concerning #5 above, I seem to recall an article in some ham magazine a number of years ago which addressed this modification. Does anyone remember that mod and where it might be found?

Thanks for all your good help, gang.

73,

Ken Gordon W7EKB

Date: Mon, 28 Apr 1997 19:52:10 -0800
From: "Kenneth G. Gordon" <keng@uidaho.edu>
Subject: AN/GRC-109

I have been having a real BLAST using this very neat little rig!

Is anyone else using this little machine, and if so, what are your comments on it?

The unit is as nicely designed and built as anything I have ever seen. Some of the design ideas are nothing short of ingenious.

73,

Ken Gordon W7EKB

Date: Tue, 29 Apr 1997 00:12:56 -0800
From: "catherine a dumar westelcom.com" <cjdumar@westelcom.com>
Subject: Re: AN/GRC-109

On 1997-04-28 keng@uidaho.edu said:

:I have been having a real BLAST using this very neat little rig!
:Is anyone else using this little machine, and if so, what are your
:comments on it?
:The unit is as nicely designed and built as anything I have ever
:seen. Some of the design ideas are nothing short of ingenious.
:73,

:Ken Gordon W7EKB

Cool... I have too. I don't have the matching power supply and receiver yet but I have home brewed a power supply to get it on the air. My question is do you have the manual for the thing? I would very much like to have a copy if you do and I am willing to pay xeroxing. The paperwork I have is nothing more than a couple of sheets for the bare basics.

So far the best antenna I have used is the windom as described by John Nagle in Ham Radio Magazine May 78 or 79 (I forget the year).

Charlie, KA2VCS (cjdumar@westelcom.com)

Anything not nailed down is a cat toy.

Net-Tamer V 1.09 Beta - Registered

Date: Tue, 29 Apr 1997 14:17:29 +1000
From: Murray Kelly <mkelly@faraday.dialix.com.au>
Subject: Re: WTD: source of Technical Ceramics

Don't know if they're still available in the US but one can still find electric bar heater-elements which are ceramic. The ones I'm thinking about are ~1.5cm diam. with a spiral groove for the nichrome wire.

Another style has no grooves but has the nichrome in a coil inside a ceramic tube. They might fill the bill?

kmlh@juno.com wrote:

>

> I am looking for any sources where I can get various items molded and
> produced; plate choke and tank coil forms in particular.

* Murray Kelly vk4aok mkelly@faraday.dialix.com.au *
* 29 Molonga Ter. / Graceville/ QLD. 4075/ Australia *
* ph/fax Intl+ 61 7 3379 3307 *

Date: Mon, 28 Apr 1997 23:53:43 -0700
From: Ray LaRue <raylarue@gte.net>
Subject: Re: HW-16...

Kenneth G. Gordon wrote:

>

> I have recently acquired an HW-16. I have been working on it and have
> it working fairly well. I intend to give it to whichever of my
> children gets his Novice + ASAP.

>

> My questions to the group are:

>

> 1) The dynamic regulation of the power-supply seems to be pretty

> poor. Is there a simple way to fix this?
>
> 2) There is an extremely loud click on break each time the key is
> opened. Is it possible to fix this without redesigning the whole
> keying system?
>
> 3) When using crystals, the unit is pretty chirpy...more so than I
> will accept. I tried voltage regulating the oscillator screen with
> a VR-150 which helped a lot, but didn't eliminate the chirp. Anyone
> here had experience with fixing this problem? The chirp is almost
> non-existent when I use an external VFO.
>
> 4) There is a TERRIBLE hum on both the received and transmitted
> signals on 80 meters (only). I thought that perhaps the bias supply
> had too much ripple (which I haven't checked yet, but will). Has
> anyone here had similar problems, and what did you do to fix it?
>
> 5) I have come up with what seems to be a pretty easy method of
> turning the HW-16 into a true transceiver (with the receiver VFO
> controlling the transmitter also). However I am concerned about a)
> how to implement RIT with a minimum of redesign, and b) stability of
> the oscillator. Anyone here have any ideas they would like to share?
>
> 6) Concerning #5 above, I seem to recall an article in some ham magazine
> a number of years ago which addressed this modification. Does anyone
> remember that mod and where it might be found?
>
> Thanks for all your good help, gang.
>
> 73,
>
> Ken Gordon W7EKB

Ken,
Sounds to me like you have one or more bad filter capacitors in your
power supply. That wouldn't be unusual for an old rig that may have been
sitting awhile. Electrolytics can easily dry up in a couple years of no
use. There is a technic for reforming caps that have been sitting. If
you don't put full power to them beforehand, they can often be saved.
But if you power it up without precautions, you run the risk of ruining
them. It may be best at this stage to just replace them. If I can help
you further, let me know.
73,
Ray, W4BYG

Date: Mon, 28 Apr 1997 21:59:39 -0700 (PDT)
From: Ken Gordon <keng@uidaho.edu>
Subject: Re: AN/GRC-109

> Cool... I have too. I don't have the matching power supply and receiver yet
> but I have home brewed a power supply to get it on the air. My question is
> do you have the manual for the thing? I would very much like to have a copy
> if you do and I am willing to pay xeroxing. The paperwork I have is nothing
> more than a couple of sheets for the bare basics.

Fair Radio Sales has the (nearly complete) manual for it for \$10.00. It

is almost as cheap as xeroxing. I will send you the transmitter schematic if you wish, but Fair Radio's deal is hard to beat!

>

> So far the best antenna I have used is the windom as described by John Nagle
> in Ham Radio Magazine May 78 or 79 (i forget the year).

I use an 145 ft end fed long wire, most of which is horizontal east-west and the rest is vertical, most of THAT up a tree in our back yard. I also use about 150 feet of wire lying on the ground as a counter-poise.

So far, I have worked 35 countries with mine. I only have about 5 crystals for it. Most of the contacts have been on 40, 2 or 3 on 20, and 1 on 15. I have ONE 30 meter rock for it, but the frequency is near the high end of the band right in the middle of the darndest QRM I have ever heard, so I have not yet worked anyone there.

My crystal frequencies (fundamental) are: 3500.00 (actually about 3502), 3510, 7015, 7048, 7050, 10120, 14000 (actually about 14003)

73,

Ken W7EKB

Date: Mon, 28 Apr 1997 22:03:27 -0700 (PDT)
From: Ken Gordon <keng@uidaho.edu>
Subject: Re: HW-16...

Thanks, Ray.

I am sure that at least ONE of the electrolytics is shot. The rig was fired up by the person I bought it from JUST before he shipped it to me. I would have rather done that myself! :-)

Kenneth G. Gordon W7EKB		College of Mines and Earth Resources
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Moscow, Idaho 83843		Moscow, Idaho 83844
(208)-882-8745		(208)-885-6133
Great Highland Pipes, Amateur Radio, Electronic Consulting, Home-Schooling		
Traditional Roman Catholic		

My PGP Public Key Upon Request.

Date: Tue, 29 Apr 1997 01:31:47 -0600
From: "catherine a dumar westelcom.com" <cjdumar@westelcom.com>
Subject: Re: AN/GRC-109

On 1997-04-28 keng@uidaho.edu said:

:cc: glowbugs@www.atl.org

:> Cool... I have too. I dont have the matching power supply and

:>receiver yet but I have home brewed a power supply to get it on

:>the air. My question is do you have the manual for the thing? I

:>would very much like to have a copy if you do and I am willing to

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:worked anyone there. My crystal frequencies (fundamental) are: 3500.
:00 (actually about 3502), 3510, 7015, 7048, 7050, 10120, 14000
:(actually about 14003) 73,
:Ken W7EKB

The only rocks I have are for 80M. Here is my address so you can send me a
copy of the schematic:

Charlie Dumar, KA2VCS
P.O. Box 393
Chazy, NY 12921

Also throw in a note for Fair Radio Sales.

The hardest thing for me to do was to homebrew a matching power connector.
Once I get things settled in I can let you know so we can get a sched going.

Charlie, KA2VCS (cjdumar@westelcom.com)

Hey! Don't shoot that postal worker <BANG!> NO CARRIER

Net-Tamer V 1.09 Beta - Registered

End of glowbugs V1 #18

%%%% GlowBugs %%%% GlowBugs %%%% GlowBugs %%%% GlowBugs %%%%

[AB4EL Ham Radio Homepage @ SunSITE](#)

Created by **Steve Modena, AB4EL**
Comments and suggestions to modena@SunSITE.unc.edu
